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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,587	01/21/2004	Atsushi Kitamura	118402	1117

25944 7590 03/28/2006

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER
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DUNWIDDIE, MEGHAN K

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/760,587

Applicant(s)

KITAMURA ET AL.

Examiner

Meghan K. Dunwiddie

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 4 is/are rejected.
- 7) ☒ Claim(s) 2 and 5-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

This Office Action is a Non-Final Rejection in response to the amendment received on December 7, 2005 by **Kitamura** et al.

### *Response to Arguments*

1. Applicant's arguments, see pages 5-7, filed December 7, 2005, with respect to the rejection(s) of claim(s) 1-5 under **Kunimochi** et al. (US 2003/0117792) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of **Akaoka** (US 2002/0135560) and **Min** et al. (US 2004/0130880).

### *Drawings*

2. The drawings were received on December 7, 2005. These drawings are acceptable.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 4, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Akaoka** (US 2002/0135560) in view of **Min** et al. (US 2004/0130880).

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5. Regarding Claim 1, **Akaoka** shows a spread illuminating apparatus comprising:

- At least one light source [Figure 1: (4)];
- A light conductive plate which allows light emitted from the at least one light source and introduced thereinto to exit out from at least one of two major surfaces thereof respectively toward at least one object to be illuminated [Figure 1: (2)];
- And a light converging means [Figure 1: (3)] having a refractive index profile in a direction orthogonal to the two major surfaces of the light conductive plate [Figure 2: (3a-3e)].

6. Regarding Claim 3, **Akaoka** shows:

- The light converging means has a height substantially equal to a thickness of the light conductive plate toward the one end surface [See Figure 1].

7. **Akaoka** does not show:

- A light converging means which is disposed between the at least one light source and the light conductive plate.

8. **Min et al.** teaches:

- A light converging means [Figure 6: (220)] which is disposed between the at least one light source [Figure 6: (120)] and the light conductive plate [Figure 6: (110)].

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9. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide the spread illuminating apparatus of **Akaoka** with a light converging means disposed between the light source and the light conductive plate as taught by **Min et al.** for the purpose and advantage of converting the light input to a surface light and emitting the surface light in a direction towards the light conductive plate.

10. Regarding Claim 4, **Akaoka** shows the claimed invention as cited above, but does not specifically teach the light converging means having its light entrance surface and its light exit surface oriented parallel to each other.

11. **Min et al.** teaches:

- The light converging means has its light entrance surface and its light exit surface oriented parallel to each other [Figure 6: (200 and 120)].

12. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide the spread illuminating apparatus of **Akaoka** with the light converging means having its light entrance surface and its light exit surface oriented parallel to each other as taught by **Min et al.** for the purpose and advantage of emitting light from the light source which is fully and effectively utilized for a brighter illumination with a similar power consumption and also to allow for downsizing of the apparatus.

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***Allowable Subject Matter***

13. Claims 2 and 5-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meghan K. Dunwiddie whose telephone number is (571) 272-8543. The examiner can normally be reached on Monday through Friday 8 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571)272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

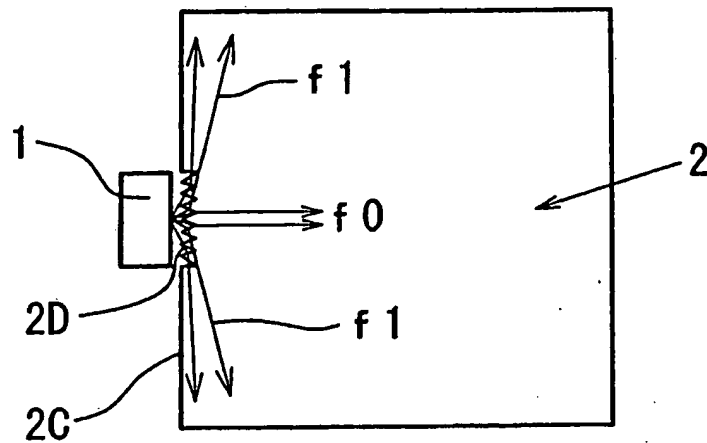
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MKD

  
Stephen Husar  
Primary Examiner

OK MKB 03/17/06

Fig. 8  
Conventional Art



DK MKD 03/17/06



Fig. 6A  
Conventional Art

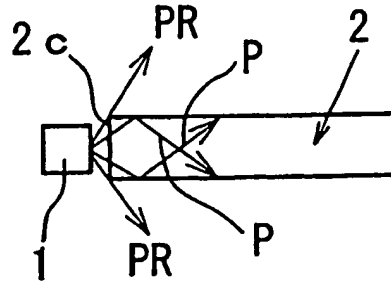


Fig. 6B  
Conventional Art

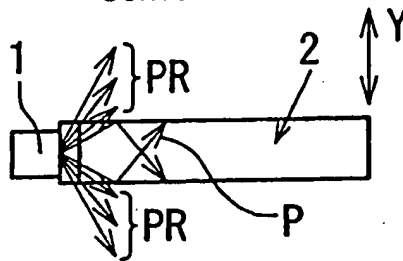


Fig. 7  
Conventional Art

